Page 1

D206-642-541

Accept



Setup Start

Stop

Stop



Revision ID: Item Name:

Replacement Skidtube

Cust Item ID:

Plan

Code

Start Date: Required Date: 16/04/2010

06/04/2010

Start Qty: 1.00 Req'd Qty: 1.00



Customer:

Reference:

Sequence ID/

Approvals:

Operation

Date:

Date:

Start Run



QC:

Date:

SPC (Y/N):

Set Up/

0.00

Run Hours

Draw

Number

Draw

Rev.

Accept Qty

Reject Reject Qty

Insp. Number Stamp

Work Center ID	Description
Draw Nbr	Revision Nbr
D3274	D .
IIN-D206-642	Rev M

100



Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

Dart Ae	rospace	e Ltd						()	da. 3.
W/O:				WO	RK ORDER CHANG	ES		di ^r .	3,
DATE	STEP		PR	OCEDURE CHAN	IGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspect
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		X			ŭ				
Part No):		PAR #:	Fault Categ	jory:	_ NCR: Yes	No DQA:	Date: _	
	R	esolution:		Disposition	:	_ QA: N/C CI	osed:	Date: _	
NCR:				WORK ORDE	R NON-CONFORMA	ANCE (NCF	R)		
DATE	OTED		scription of NC		Corrective Action Section	ion B	Verification	Approval	Approv
DATE	STEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspect
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Work Order		61										Page 2
Revision ID:	D206-642-541			Accept					Setup	Start		
		Start Qty: 1.00 Req'd Qty: 1.00			Cust Item Customer					Stop		
Approvals:	Process Plan	•	Date:	Tooling:	I	Date:	··		Run	Start		
•	QC:		_ Date:	SPC (Y/N):	I	Date:				Stop		
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
		Skidtubes		0.00								
Skidtubes Skidtubes		Memo ****VERIF	Y AND INSPECT THE M	0.00 IATERIAL PRIOR TO U	JSE***							
		1- Bend FW end of tube	/D end of tube using bend with saw table setup D327	prog D3274 FWD dwg D 4.	03274, cut fwd \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	01417	7					
			wd indexing ridge as per d			0-4	8					
:			cap as per dwg D3274 an ninum Rod Batch:	<i>*</i>	67 BE 18	104/12						
			d cap weld on top surface	- 76	•	• • •	•					
			end of tube at 170.9" as pecap pilot hole using DT80.		r end.		4					
		7 -Cleco Di	Section 2015 Secti	ll pilot hole drill Jig DT8	8742A,B,C,D.	1 4	10 R	{/\-\	\			
	•	8 -Remove batch #	inner indexing ridge on aft	end of skidtube as per D	bwg D3274 scribe							
1		9 -Open aft	end cap holes to Ø0.208"	as per Dwg D3274. Debi	urr aft end.	/						

W/O:	rospace				ODK ODDED OUANOE					, v 11
·					ORK ORDER CHANGE				Approval	A
DATE	STEP		PR:	OCEDURE CHA	ANGE	Ву	Date	Qty	Chief Eng / Prod Mgr	Approva QC Inspecto
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		,						į	· .	
Part No) :		DAD #.				<u> </u>		_	1
Resolution			PAR #:	Fault Cate	egory:	NCR: Ye	s No 🗅)QA:	Date: _	
	Re				egory:					
NCR:	Re			Dispositio		QA: N/C	Closed:			
		solution		Disposition	DER NON-CONFORMAI Corrective Action Section	QA: N/C NCE (NC	Closed: _CR)	<u> </u>	Date:	• •
NCR:	STEP	solution		Dispositio	DER NON-CONFORMAL	QA: N/C	Closed: _CR)	ż	Date: _	Approva
		solution	escription of NC	Disposition WORK ORE Initial	DER NON-CONFORMAI Corrective Action Section Action Description	QA: N/C	Closed: _CR)	ification	Date:	Approva
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		solution	escription of NC	Disposition WORK ORE Initial	DER NON-CONFORMAI Corrective Action Section Action Description Chief Eng	QA: N/C	Closed: _CR)	ification	Date:	Approva

Work Orde		361									Page 3
Revision ID:	D206-642-54			Accept					Setup		
	Replacement S 06/04/2010 16/04/2010	Start Qty: 1.00 Req'd Qty: 1.00			Cust Item II Customer:	D:				Stop	
Approvals:	Process Plan	n:	Date:	Tooling:	Da	te:			Run	Start	
App. o. mo.	QC:		Date:	SPC (Y/N):	Da	Date:				Stop	
Sequence ID/ Work Center ID 120 HandFinish Hand Finishing	,	Operation Description Chemical Conversion Con Memo	nt per QSI005 4.1	Set Up/ Run Hours 0.00	Draw Number	Draw Rev.	Plan Code	Accep Qty	Ot Re Qt		Reject Insp. Number Stamp
130 QC Quality Control		QC3- Inspect Part Finish Memo		0.00				l	_· <u> </u>	1011	4/15

140

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00 5 10 00/15

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval** Approval^{*} **STEP** DATE **PROCEDURE CHANGE** By **Date** Qty Chief Eng / QC Inspector Prod Mgr Part No: PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ____ Disposition: _____ QA: N/C Closed: ____ Date: ____ Resolution WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B Description of NC Verification Approval Approval DATE **STEP** Sign & Initial **Action Description** Section A Section C QC Inspector Chief Eng Chief Eng Date Chief Eng

Work Orde		361									Page 4	
Item ID: Revision ID:	D206-642-54	41		Accept					Setup	Start		
Item Name:	Replacement 5	Skidtube								Stop		
Start Date:	06/04/2010	Start Qty: 1.00			Cust Item]	ID:						1418 318 1121 1221
Required Date: Reference:	16/04/2010	Req'd Qty: 1.00			Customer:							
Approvals:	Process Pla	ın:	Date:	Tooling:	D:	ate:			Run	Start		
	QC:		Date:	SPC (Y/N):	D:	ate:				Stop		
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
		Skidtubes		0.00								_
Skidtubes		Memo		0.00	١							
Skidtubes		D3274	ossbolt spacer holes as pe	It spacer holes using DT87								
		3-Bond web A/R□□Sika Sikaflex exp	in place as per Dwg D3: aflex-291□ 112 42 bire date:□ 12. 4/15 □Time:□ 12. 4/4/20 □Time:□ 5.4	<u>9</u> 00	/ n	10/4	/15					
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		QC5- Inspect part comple	eteness to step on W/O	0.00	104/20			6.)			
QC Quality Control		Memo		0.00	· -	•		- (cc	<u> </u>			·

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W/O:				WO	RK ORDER CHAN	NGES					
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Part No:			PAR #:	Fault Cate	R: Yes	No DQ	A:	Date:			
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DATE	STEP		Section A	Initial Chief Eng	Action Descriptio Chief Eng		Sign of Date	& Section		Approval Chief Eng	Approva QC Inspecto
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Work Orde <i>April 6, 2010 8:</i>		361								Page 5
Revision ID:	D206-642-54			Accept				Setup Star		
Start Date: Required Date: Reference:	06/04/2010 16/04/2010	Start Qty: 1.00 Req'd Qty: 1.00		=:	Cust Item II Customer:	D:			(1.2.01112) (9401 0 (1 0)1 0 (10 0)
Approvals:	Process Pla	nn:	Date:	Tooling: SPC (Y/N):		te:		Run Star Sto		
Sequence ID/ Work Center II 170 Skidtubes Skidtubes		drop pins in 2- DRILL PI OPEN HOL 3-DRILL TO END OF TU DEBURR I REMOVE A	crossbolt spacer holes to ILOT HOLES FOR WE, ES TO .297". Deburr DE PIN HOLE .640" DL JBE NSIDE OF HOLE AS N ANY FOREIGN OBJEC ink crossbolt spacer hole	Set Up/ Run Hours 0.00 0.00 1 prog. D3274 AFT as per dw o maintain web position. ARPLATES USING D3274- A AS PER DWG USING DT DECESSARY (DO NOT ENITY INSIDE OF TUBES es as per Dwg D3274	1T2 8935 FWD	Draw Rev.	Accept Qty	Qty	Reject Number	Insp. Stamp

180 QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

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Dart Ae	rospace	e Ltd							
W/O:				W	ORK ORDER CHANGE	S			
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DATE	OTED	<u> </u>	escription of NC	,	Corrective Action Section		Verification	Approval	Approval
DATE	STEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto
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Work Order ID April 6, 2010 8:57:22 A									Page
Item ID: D206-6 Revision ID: Item Name: Replace			Accept			S	Setup Sta		
Start Date: 06/04/2 Required Date: 16/04/2 Reference:		1848 186 186 1848 186 186		Cust Item I Customer:	D:	H.	Sto	P	
Approvals: Proces QC:	ss Plan:		Tooling: SPC (Y/N):		ite:	 Ţ	Run Sta Sto		
Sequence ID/ Work Center ID 190 Skidtubes Skidtubes	D3274. R aluminum A/R□□Al 3-Grind cr	emember to back drill each rod uminum Rod [- /	er side. Use 10/04/26 BC 10/05	Draw Rev.	Accept Qty	Reject Qty	Reject Number	Insp.
200 QC	QC5- Inspect part com	pleteness to step on W/O	0.00 \$ (6/67)	N S	•	@	- <u></u>		

Quality Control

Dart Ae	rospace l	Ltd							,		
W/O:				WC	RK ORDER CHA	ANGES					
DATE	STEP		PR	OCEDURE CHA	NGE		Ву	Date	Date Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto
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DATE	STEP		Section A	Initial Chief Eng	Action Descript Chief Eng	tion	Sign 8 Date		tion C	Chief Eng	QC Inspect
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Work Order ID 57361

April 6, 2010 8:57:22 AM

Required Date: 16/04/2010



Page 7

Item ID:

D206-642-541

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Start Date:

06/04/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID: Customer:

Draw

Reference:

Process Plan: _____ Date: ____

Tooling:

0.00

Run

Start

Stop



Insp.

QC: ______ Date: ____ SPC (Y/N):

Date:

Date:

Draw

Rev.

Plan

Code

Stop

Reject

Qty

Number Stamp

Sequence ID/ **Work Center ID**

210



Quality Control

Operation Description

QC10- Inspect visual per QSI004- ground welds

Set Up/ Run Hours

Number

Accept

Otv

Reject

220



Hand Finishing

Pressure Wash per QSI005 4.3

Memo

Al 16-5-6

230



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M114707

0.00

Memo

START TIME: 10:45 AM OVEN TEMPERATURE: 3200 FINISH TIME: 11:15AM

=> 10/05/06 ---

Dart Ae	rospace	e Ltd								, ,
W/O:				WO	RK ORDER CHANGES)				•
DATE	STEP		PR	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto
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DATE	STEP		Description of NC Section A	Initial Chief Eng	Corrective Action Section E Action Description Chief Eng	Sign of Date			Approval Chief Eng	Approval QC Inspecto
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Work Order ID 57361

April 6, 2010 8:57:22 AM



Page 8

Item ID:

D206-642-541

Accept

Setup Start



Revision ID:

Item Name: Replacement Skidtube

Cust Item ID:

Customer:

Draw

Number

Start Date:

06/04/2010 **Required Date: 16/04/2010**

Start Otv: 1.00 Rea'd Otv: 1.00

Reference:

Approvals:

Process Plan: _____ Date:

Tooling:

Run

Start



Date: SPC (Y/N):

Set Up/

Run Hours

Date: Date:

> Plan Draw

> > Code

Rev.

Accept

Otv

Reject Reject Otv

Stop

Insp. Number Stamp

Work Center ID

240

Sequence ID/

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

0.00

0.00

A DR 10-5-10.

250



HandFinish Hand Finishing HandFinishing

0.00

Memo

0.00

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.

A/R□N/A□LPS-3□

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

A/R□□Sikaflex-291 □

Sikaflex expire date:

Bl 10-5-10.

260



Quality Control

QC5- Inspect part completeness to step on W/O

Memo

Inspect Nut Plate & Inserts

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval** Approval QC Inspector DATE **STEP PROCEDURE CHANGE** By Qty Chief Eng / Date Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ___ Resolution Disposition: _____ QA: N/C Closed: _____ Date: _____ WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B Description of NC Verification **Approval Approval STEP** DATE Sign & Initial **Action Description** Section A Section C Chief Eng QC Inspector Chief Eng Chief Eng Date

Work	Order	ID	57361

April 6, 2010 8:57:22 AM



Page 9

Item ID:

D206-642-541

Accept



Setup Start

Stop



Revision ID:

Item Name: Replacement Skidtube

Start Date:

06/04/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:	Process 1
Trbbioinis.	1100000

Required Date: 16/04/2010

QC:

Date: _____

Date: _____ SPC (Y/N):

Tooling:

Date: Date: Run Start



Stop



Sequence ID/ **Work Center ID**

270



HandFinish Hand Finishing Operation **Description** Set Up/ Run Hours

Draw Number

Draw Rev.

Plan

Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

HAND FINISHING RESOURCE #1

Memo

0.00

0.00

1-Install wearpads & gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274 A/R□□Sikaflex-291 □

Sikaflex expire date:

3-Inspect for foreign objects as per QSI 024

4-Spray inside of tube on both sides of web with LPS-3 LPS-3

A/R

5-Install Aft Cap and seal with Sikaflex Chean excess adhesive.

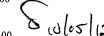
A/R□□Sikaflex-291 Sikaflex expire date:

BR 10-5-10.

280



QC5- Inspect part completeness to step on W/O



Quality Control

Memo

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval** DATE **STEP PROCEDURE CHANGE** By Qty Chief Eng / **Date** QC Inspector Prod Mgr Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ Resolution Disposition: _____ QA: N/C Closed: _____ Date: ____ WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B **Description of NC** Verification **Approval Approval** DATE **STEP** Sign & Initial **Action Description** Section A Chief Eng QC Inspector Section C Chief Eng Chief Eng Date

Work Order ID 57361

April 6, 2010 8:57:22 AM



Page 10

Item ID:

D206-642-541

Accept



Setup Start

Stop



Revision ID: Item Name:

Replacement Skidtube

Cust Item ID:

Customer:

Draw

Start Date:

06/04/2010 **Required Date:** 16/04/2010

Start Qty: 1.00 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date:_____

Tooling:

SPC (Y/N):

Date:

Draw

Run Start



Sequence ID/ **Work Center ID**

290

Packaging

Packaging

Operation Description

Identify as per dwg & Stock Location:

Memo

Memo

Date:

0.00

Set Up/ **Run Hours**

0.00

Number Rev.

Date:

Plan Code

Reject Accept Oty **Qty**

Reject

Stop

Insp. Number Stamp

300

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

PS10-5-17

W/O:				ES	,								
DATE	STEP		PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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Part No	:		PAR #:	Fault Ca	tegory:	NCR: Yes No DQA: Date:							
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Picklist Print				·				Page 1
April 6, 2010 8:57:26 AM								1 age 1
Work Order ID: 57361								t l
Parent Item: D206-642-541								
Parent Item Name: Replacement Skidtu	ibe		***************************************	1	S	tart Date:	06/04/2010	Required Date: 16/04/2010
Comments: IPP Rev:B□05.09.2 IPP Rev:C 07-02 IPP Rev:D 07-12 IPP Rev:E 08-04	-06 replace NAS1515H3	s & Gaskets JLM□ L to D3672-1 DD			S	Start Qty:	1.00	Required Qty: 1.00
D2600-1-190 Extrusion Round 3" 206	Manufactured No		110	Each	50.0000	1.0000		
		Warehouse Location Main Warehouse	Loc	: Oty	Loc Code			
		LG		50				
D3285-1	11000	- 47575		50				LMP1417
Cap	Manufactured No		110	Each	164.0000	1.0000		
		Warehouse Location	Loc	<u>Otv</u>	Loc Code			
		Main Warehouse	•					
		LG 47635		164 15				- BE 10/04/12
i i		52511		74				_ WB 70/041 \ =
D3282-041 Float Web (206L/407)	Manufactured No	52647	150	75 Each	4.0000	1.0000		
: ::::::::::::::::::::::::::::::::::::		Warehouse Location	Loc	Oty	Loc Code			
		Main Warehouse LG		4				,
		52696		4 4			-(-	n 10/4/15

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W/O:		·		WO	RK ORDER CHANGE	S			
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DATE	STEP		escription of NC Section A	Initial	Corrective Action Section Action Description	n B	Verification	Approval	Approva
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April 6, 2010 8:57:26 AM

Work Order ID: 57361

Parent Item: D206-642-541

Parent Item Name:

Replacement Skidtube

Comments:

D2649

IPP Rev:B□05.09.23 □Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23 IPP Rev:D 07-12-06

Added SS Wearplates & Gaskets JLM

No

IPP Rev:E

08-04-17

replace NAS1515H3L to D3672-1 DD as per PAR 08-015 DD verified by:EC

Manufactured

Manufactured

190

Each

85.0000

Loc Code

12000

12.0000

Start Date: 06/04/2010

Start Qty: 1.00

Cross Bolt Spacer

Warehouse

Location

Main Warehouse

LG

55000

85 85

Loc Oty

20

20

Each

Each

Loc Qty

20.0000

Required Date: 16/04/2010

Required Qty: 1.00

Crossbolt Spacer

D3275-1

Warehouse

Location

Main Warehouse

LG

53453

CR3212-4-03

Purchased

Cherry Rivet

No

250

190

219.0000 2.0000

Warehouse Loc Qty Loc Code Location

Main Warehouse

ST311

111359 • 112314

219 92

127

2 8/10-5-10

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval DATE STEP PROCEDURE CHANGE** By Qty Date Chief Eng / QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ Disposition: _____ QA: N/C Closed: ____ Date: ____ Resolution WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B **Description of NC** Verification Approval Approval DATE **STEP** Sign & **Action Description** Initial Section A Chief Eng QC Inspector Section C Chief Eng Chief Eng Date

Picklist Print April 6, 2010 8:57:26 AM Work Order ID: 57361 Parent Item: D206-642-541 Parent Item Name: Replacement Skidtube Comments: D3415-041 Nut Plate



Start Date: 06/04/2010

Required Date: 16/04/2010

Start Oty: 1.00

Required Oty: 1.00

IPP Rev:B□05.09.23 □ Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM□ IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Manufactured

250

Each

75.0000 1.0000

Warehouse Location	Lo	oc Qty	Loc Code	
Main Warehouse				
ST056		75		
33842		75		
	250	Each	726.0000	2.0000

- bl 10-5-10

Cherry Rivet

CCR264SS3-3

Warehouse	Lo	c Oty	Loc Code	
Location				
Main Warehouse				
ST311		726		
111548 🗸		4		
112314		4		
113539		92		
113973		626		
	250	Each	40.0000	78.000

= BR 10-5-10

ALS4-1032-130

Purchased

Purchased

No

No

Insert

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
ST282/144107	40	
110511	40	

78. BR10-5-10.

Resolution		Disposition:			QA: N/C C	losed:	Date: _					
NCR:			WORK ORDER NON-CONFORMANCE (NCR)									
		F	escription of NC		Corrective Action	Section B	Verification	T	Approval QC Inspector			
DATE	STEP	P	Section A	Initial Chief Eng	Action Descripe Chief Eng	tion Sign Date		Approval Chief Eng				
									-			
									-			
	:	1										
	1	1										

April 6, 2010 8:57:26 AM

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:B□05.09.23 □ Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23 IPP Rev:D 07-12-06

IPP Rev:E

08-04-17

Added SS Wearplates & Gaskets JLM□

replace NAS1515H3L to D3672-1 DD as per PAR 08-015 DD verified by:EC

Start Date: 06/04/2010

Required Date: 16/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3536-15

Gasket

Manufactured No

270

Each

19.0000 1.0000

			Warehouse Location	Ì	Loc Oty	Loc Code		
D3536-23	Manufactured	No	Main Warehouse FP 51600 7 56055	270	19 7 12 Each	7.0000	1.0000	

Warehouse Location

Loc Qty

Loc Code

Main Warehouse

7

1 BR 10-5-10

D3536-35

Gasket

Manufactured

No

270

Each

11.0000 1.0000

Warehouse Loc Oty Loc Code Location Main Warehouse FP 11 51628V 11

BR 10-5-10.

Dart Aerospace Ltd W/O: WORK ORDER CHANGES DATE STEP PROCEDURE CHANGE By Date Qty Prod Mgr Approval Ochief Eng / Prod Mgr

Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution	:	Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
D.4.T.F	0	Description of NC		Corrective Action Section B	Verification	Ammanal	Ammassal			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
							-	-		
		,								
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Picklist Print

April 6, 2010 8:57:26 AM

Page 5

Required Date: 16/04/2010

Required Qty: 1.00

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:B□05.09.23□Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23

Added SS Wearplates & Gaskets JLM replace NAS1515H3L to D3672-1 DD

IPP Rev:E

IPP Rev:D 07-12-06 08-04-17

as per PAR 08-015 DD verified by:EC

Manufactured

270

Each

11.0000 1.0000

Start Date: 06/04/2010

Start Qty: 1.00

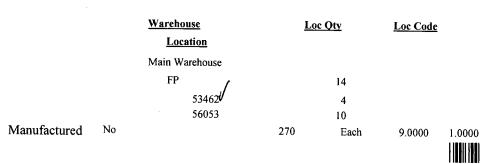
Gasket

D3536-39

		Warehouse	Lo	oc Oty	Loc Code	
		Location				
		Main Warehouse				
		FP		11		
		48161		1		
		51637		10		
Manufactured	No		270	Each	14.0000	1.0000

Wearshoe

D3535-15



Wearshoe

D3535-35

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP /	9	
51608	9	

1 pl 10-5-10.

pk 10-5-10

= 1 \$L10-5-10.

Dart	Aerospa	ace	Lto
w/o·			

W/O:			WORK ORDER CHANGES										
DATE	STEP		PROCE	EDURE CH		AITGEO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
						"							
						·							
Part No:		PA	R #:	Fault Ca	tegory:	NCI	R: Yes I	No DQ	A:	Date:	<u> </u>		
		lutior:				QA:	N/C Clo	sed:		Date:			
NCR:			WC	ORK OR	DER NON-CONFO	PRMANCE	(NCR)					
DATE	STEP		escription of NC Corrective Action		Section B	Verific	ation	Approval	Approval				
		Section A		Initial Chief Eng	Action Descrip Chief Eng	otion	Sign & Date	Secti	on C	Chief Eng	QC Inspector		
											-		

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Required Date: 16/04/2010

Required Qty: 1.00

Work Order ID: 57361

D206-642-541

Parent Item Name:

Parent Item:

Replacement Skidtube

Comments:

IPP Rev:B□05.09.23□Revised per D206-642 Rev. J□KJ/JLM IPP Rev:C 07-02-23

IPP Rev:D

Added SS Wearplates & Gaskets JLM

No

07-12-06 IPP Rev:E 08-04-17

replace NAS1515H3L to D3672-1 DD as per PAR 08-015 DD verified by:EC

D3535-39

Manufactured

Manufactured

270

Each

9.0000 1.0000

Loc Code

Start Date: 06/04/2010

Start Qty: 1.00

Wearshoe

Warehouse Location

Main Warehouse

FP

51619

9 9

270

270

Loc Qty

Each

14.0000 1.0000

De 10-5-10.

Wearshoe

D3535-23

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

53467

14 2 12

Each

bl 10-5-10.

D3537-3

Wearpad

Manufactured No

Warehouse

Loc Qty

Loc Code

20.0000

1.0000

Location

Main Warehouse

35697

20 20 1 Bl 10-5-10.

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval** DATE **STEP PROCEDURE CHANGE** By Qty Chief Eng / Date QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ___ Resolution ______ Disposition: _____ QA: N/C Closed: _____ Date: ____ WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B Description of NC Verification Approval **Approval STEP** DATE Sign & **Action Description** Initial Section A Chief Eng QC Inspector Section C **Date** Chief Eng Chief Eng

Required Date: 16/04/2010

Required Oty: 1.00

April 6, 2010 8:57:26 AM

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:B□05.09.23□Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23 IPP Rev:D 07-12-06

Added SS Wearplates & Gaskets JLM replace NAS1515H3L to D3672-1 DD

IPP Rev:E

08-04-17

as per PAR 08-015 DD verified by:EC

Manufactured

No

No

270

Each

51.0000 9.0000

Start Date: 06/04/2010

Start Qty: 1.00

Wearpad

D3537-1

Warehouse

Loc Code

Location

Main Warehouse

51 51

Each

Loc Qty

Each

0.0000

80. ft 10-5-10.

AN960C10L

washer

AN960C416

Purchased

Purchased

NAS1449C0332R

270

377.0000 1.0000

80.0000

washer

Warehouse

Loc Qty

377

377

Loc Code

Location

Main Warehouse

ST346

100993

I BR 10-5-10.

Dart Aerospace Ltd W/O: WORK ORDER CHANGES DATE STEP PROCEDURE CHANGE By Date Qty

Part No:		PAR #:	Fault Cate	gory:	NCR: Yes N	lo DQA:	Date: _		
	Resolution:			Disposition	n:	_ QA: N/C Clos	sed:	Date:	
NCR:				WORK ORDE	ER NON-CONFORMA	NCE (NCR)		······································	
DATE STEP	D	scription of NC	Corrective Action Section B			Verification	Approval		
	SIEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approva QC Inspecto
									-
į									

Approval
Chief Eng /
Prod Mgr

Approval QC inspector

Picklist Print

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Required Date: 16/04/2010

Required Qty: 1.00

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:B \square 05.09.23 \square Revised per D206-642 Rev. J \square KJ/JLM

IPP Rev:C 07-02-23

IPP Rev:D 07-12-06

Added SS Wearplates & Gaskets JLM

No

replace NAS1515H3L to D3672-1 DD

IPP Rev:E

08-04-17

as per PAR 08-015 DD verified by:EC

Manufactured No

Purchased

270

Each

1,589.000 2,0000

Start Date: 06/04/2010

Start Qty: 1.00

Phenolic Washer

D3672-1

Warehouse	Loc Qty	Loc Code
<u>Location</u> Main Warehouse		
ST077	1589	
47628 51674	89	
52505	500 1000	
11. 12	. ~270 Each ,,	1,249.000 80.0000

AN3C4A **BOLT**

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST350 114416	1249	
113226	248	
114103	501	
114108	500	

Dart Ae	rospace Lt	d								4		
W/O:			WORK ORDER CHANGES									
DATE	STEP	PR	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto		
Part No: PAR #:		PAR #:	Fault Cate	gory:	_ NCR	: Yes	No DG	A:	Date:			
		lution:	Disposition	n:	_ QA:	N/C CI	osed:		Date: _			
NCR:			WORK ORDE	R NON-CONFORM	ANCE	(NCR	3)					
5		Description of NC	Corrective Action		Section B		Varification		Annuoval	Approva		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	scription Sign & Date				Approval Chief Eng	Approva QC Inspect		
										-		
		}										

Picklist Print

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Page 9

Required Date: 16/04/2010

Required Qty: 1.00

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:B□05.09.23 □ Revised per D206-642 Rev. J□KJ/JLM

Purchased

Manufactured

IPP Rev:D

IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM□ 07-12-06 replace NAS1515H3L to D3672-1 DD as per PAR 08-015 DD verified by:EC

IPP Rev:E

08-04-17

No

270

Each

534.0000 1.0000

Start Date: 06/04/2010

Start Qty: 1.00

BOLT

AN4C5A

Warehouse	Lo	c Oty	Loc Code		
Location					
Main Warehouse					_
ST346 - /		534			
110552		34			BK 10-5-10
112243		500			<u> </u>
	270	Each	35.0000	1.0000	
· 1					

D2646

Aft Cap

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP6	28	
52663	28	
Main Warehouse		
fp7	7	
52663	7	

I fl 10-5-10.

Dart Ae	rospace Lt	d							•
W/O:			WO	RK ORDER CHANGE	S				
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng./ Prod Mgr	Approva QC Inspect
Part No		PAR #:							
	Reso	lution:	Disposition);	QA: N/C	Closed:		Date: _	
NCR:			WORK ORDE	R NON-CONFORMAN	ICE (NC	R)			•
247		Description of NC		Corrective Action Section	В	Vorifie	cation	Approval	Annua
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Secti	ion C	Approval Chief Eng	Approva QC Inspect
									-
1									

Picklist Print

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Page 10

Required Date: 16/04/2010

BP 16-5-12

Required Oty: 1.00

Work Order ID: 57361

Parent Item:

D206-642-541

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:B□05.09.23□Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23 IPP Rev:D 07-12-06

Added SS Wearplates & Gaskets JLM replace NAS1515H3L to D3672-1 DD

IPP Rev:E

08-04-17

as per PAR 08-015 DD verified by:EC

D3413-1

Manufactured No

51586

53446

270

Each

31.0000 1.0000

Start Date: 06/04/2010

Start Qty: 1.00

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
ST473 58524	31	

8

23

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES** Approval **Approval** DATE STEP PROCEDURE CHANGE Bv Qty Date Chief Eng / QC Inspector Prod Mar Part No: PAR #: ____ Fault Category: ____ NCR: Yes No DQA: ___ Date: Disposition: QA: N/C Closed: Date: Resolution WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B Description of NC Verification Approval **Approval** DATE **STEP** Sign & Initial **Action Description** Section A Section C Chief Ena QC Inspector Chief Eng Chief Eng Date



	DESIG	°CP	DRAWN BY	DART AEROSPACE USA, INC.
ı	CHEC	(ED A	APPROVED 4	DRAWING NO. REV. D
ı		#		D3274 SHEET 1 OF 4
ı	DATE			TITLE SCALE
	06.1	2.19		SKIDTUBE ASSEMBLY NTS
	Α		04.03.15	NEW ISSUE
Į	В		04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76
	С		05.03.16	ADD -043; NEW INSERTS
	D		06.12.19	NEW INSERTS, SS WEARSHOE + GASKET

BS10-4-06



Qty -041	Qty -043	Part Number	Description]	
Х	1	D3274-041	SKIDTUBE ASSEMBLY		
	Х	D3274-043	SKIDTUBE ASSEMBLY]	
1	1	D2600-1-240	EXTRUSION	1	
1	1	D2646	AFT CAP	SHOP COPY	
12	12	D2649	CROSS BOLT SPACER	RETURN TO	
12	37	D3275-1	CROSS BOLT SPACER	ENGINEERING	
1	1	D3282-041	FLOAT WEB 1D	CONTROLLED	00
1	1	D3285-1	ICAP		
1	1	D3413-1	RING	BJECT TO AMENU	ME
1	1	D3415-041	NUT PLATE	WITHOUT NOTIN	E
1	1	D3535-15	WEARSHOE	WORK ORDER	2
1	1	D3535-23	WEARSHOE	0 5734	
1	1	D3535-35	WEARSHOE		
1	1	D3535-39	WEARSHOE	BS10-	,,
1	1	D3536-15	GASKET	1 BA10-1	1.
1	1	D3536-23	GASKET	1 //° I	
1	1	D3536-35	GASKET	1 1	
1	1	D3536-39	GASKET	1 1	
9	9	D3537-1	WEARPAD	1 1	
1	1	D3537-3	WEARPAD		
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)	1	
80	80	AN3C4A	BOLT	1	
1	1	AN4C5A	BOLT	1	
1	1	AN960C416	WASHER	1 1	
80	80	AN960C10L	WASHER	7 1	
2	2	CCR264SS3-3	RIVET	1 1	
2	2	CR3212-4-03	RIVET	1 1	
2	2	NAS1515H3L	WASHER	1 1	

GENERAL NOTES:

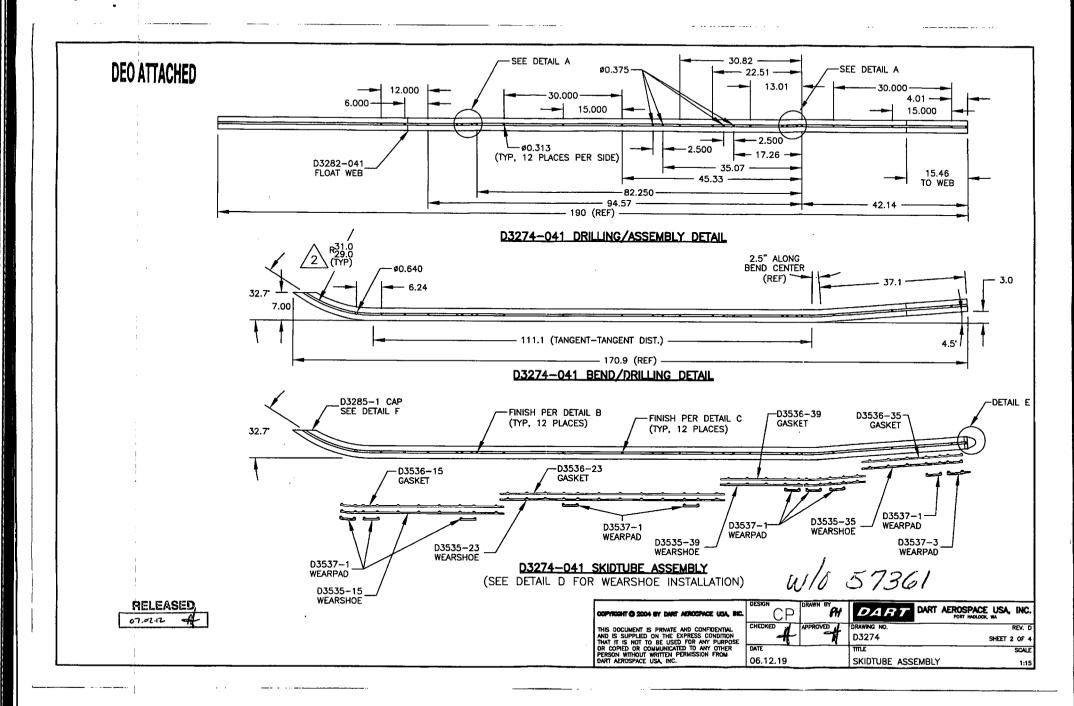
- 1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2. DAMAGE TOLERANCE ON FWD BEND:

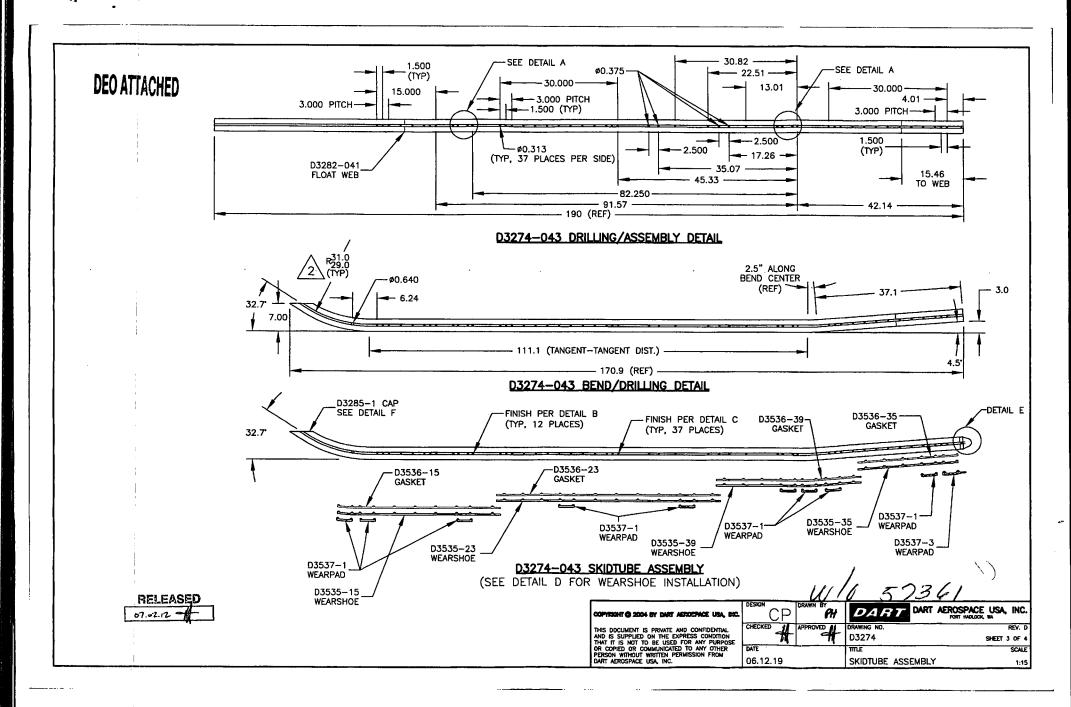
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

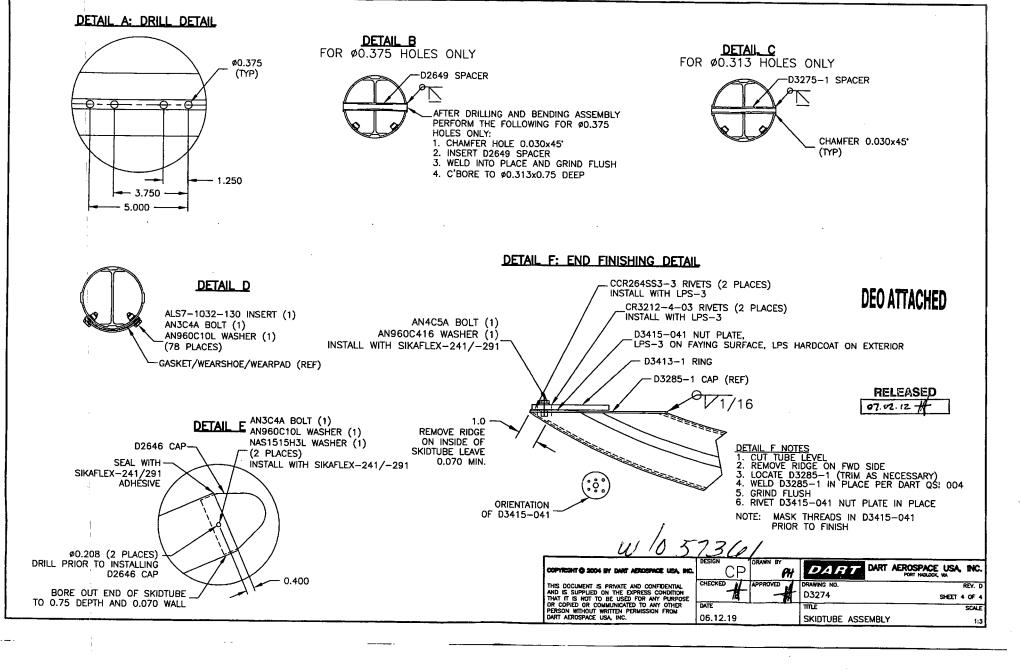
- 3. ALL HOLES DRILLED ON CENTERLINES.
- 4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- 5. WELDING TO BE DONE PER DART QSI 004.
- 6. FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- 7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
- 8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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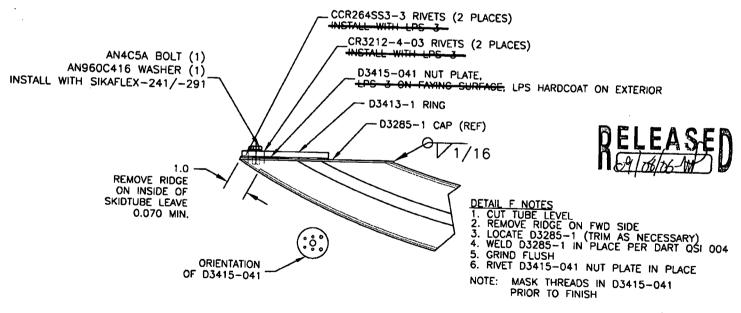
DRAWING NO.	TITLE	REV. D DART AEROSPACE	LICA INC.		
D3274	SKIDTUBE ASSEMBLY	ENGINEERING OF	DED DOZE D	SHEET NO.	SCALE
DRAWN (1)	CHECKED	MFG. APPR.		SHEET 1 OF 1	NTS
DATE 09.06.	17 DATE 09.06	22	APPROVED APPROVED	DE APPR.	
		123 DATE 59/06/23	DATE 09/06/23	DATE 09.06.23	

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "SPRAY INSIDE OF TUBE WITH A COAT-OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

DETAIL F: END FINISHING DETAIL



w/05736/

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AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Barcla; Elliott	
Job number: 5735%	
Part number: Dacco Wid - 511	
Description: float tabe	_
Welding Process: Tigl / Migf]	
Base materiel: Aluminian	
Current: AC DC]	

TEST REQUIREMENTS AND RESULTS

Visual: Penetration:	pass[V] fail[] pass[Y] fail[]
<u>UNACCEPTABLE</u>	
Cracks: Undercut: Pin holes: Overlap (cold lap) Porosity (surface): Coloration:	pass[] fail[]
Qualifier 1 at. 1/2	Date of Test Coupon 10.05.05
Welder Borday Ellison	Date of Test Coupon 10-05-05

The above named individual is qualified in accordance with AWS D17.1.2001 to weld